

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. **(Original)** An apparatus for pulling a single crystal comprising
a chamber means,
a crucible located in the chamber means,
a heater for heating a material provided in the crucible so that the material is melt,
a radiation shield located in the chamber means so as to surround a region in which a single crystal is pulled, for regulating flow of inert gas introduced therein, wherein a seed crystal is immersed into the melt material to pull the single crystal, the radiation shield being made of graphite based material coated with silicon carbide,
the radiation shield comprising a main shield body, a horizontal part, and a rising part,
the main shield body being located so as to surround the single crystal and being formed of a hollow pipe,
the horizontal part extending inward and substantially horizontally relative to a surface of the melt material from the main shield body and being formed of a ring shape,
wherein the rising part rises upward along the single crystal and is formed of a ring shape,
a first curvature formed between the main shield body and the horizontal part,
a second curvature formed between the horizontal part and the rising part,
and
wherein each of the first curvature and the second curvature has an inside corner with a curved surface.
2. **(Original)** An apparatus according to claim 1, wherein a mounting part extends outward from an upper end of the main shield body, the mounding part being formed

of a ring shape, and wherein a third curvature with a curved surface is formed between the main shield body and the mounting part.

3. **(Original)** An apparatus according to claim 1, wherein each curved surface is formed of a circular arc or an elliptic arc in cross section, and wherein the curved surface has a radius of curvature of 5mm or more.

4. **(Currently amended)** An apparatus according to ~~any one of claims 1 to 3~~ claim 1, wherein a heat insulating material with a ring shape is supported by the main shield body, the horizontal part, and the rising part.

5. **(Original)** An apparatus according to claim 4, wherein a cover is provided for covering the heat insulating material, the covering being constructed dividable into a plurality of rings having different heat conductivities.

6. **(Currently amended)** An apparatus according to ~~any one of claims 1 to 5~~ claim 1, wherein the main shield body and the horizontal part are arranged substantially in an obtuse angle, and the horizontal part and the rising part are arranged substantially in a right angle.

7. **(New)** An apparatus according to claim 2, wherein a heat insulating material with a ring shape is supported by the main shield body, the horizontal part, and the rising part.

8. **(New)** An apparatus according to claims 3, wherein a heat insulating material with a ring shape is supported by the main shield body, the horizontal part, and the rising part.

9. **(New)** An apparatus according to claim 2, wherein the main shield body and the horizontal part are arranged substantially in an obtuse angle, and the horizontal part and the rising part are arranged substantially in a right angle.

10. **(New)** An apparatus according to claim 3, wherein the main shield body and the horizontal part are arranged substantially in an obtuse angle, and the horizontal part and the rising part are arranged substantially in a right angle.

11. **(New)** An apparatus according to claim 4, wherein the main shield body and the horizontal part are arranged substantially in an obtuse angle, and the horizontal part and the rising part are arranged substantially in a right angle.

12. **(New)** An apparatus according to claim 5, wherein the main shield body and the horizontal part are arranged substantially in an obtuse angle, and the horizontal part and the rising part are arranged substantially in a right angle.